IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION

AVAGO TECHNOLOGIES U.S., INC., ET AL.	§	
	§	
Plaintiffs	§	
	§	**CASE NO. 6:10-CV-92**
vs.	§	**PATENT CASE**
	§	
STMICROELECTRONICS, INC., ET AL.	§	
	§	
Defendants	§	

MEMORANDUM OPINION

This Memorandum Opinion construes the terms in United States Patent No. 6,172,354 ("the '354 patent"), U.S. Pat. No. 7,643,007 ("the '007 patent"), U.S. Patent No. 7,652,661 ("the '661 patent"), U.S. Patent No. 7,126,585 ("the '585 patent"), and U.S. Pat. No. 5,686,720 ("the '720 patent").[1]

APPLICABLE LAW

"It is a 'bedrock principle' of patent law that 'the claims of a patent define the invention to which the patentee is entitled the right to exclude.'" *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting *Innova/Pure Water Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). In claim construction, courts examine the patent's intrinsic evidence to define the patented invention's scope. *See id.*; *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 861 (Fed. Cir. 2004); *Bell Atl. Network Servs., Inc. v. Covad Commc'ns Group, Inc.*,

[1] The parties disputed one term in the '720 patent: "including simultaneous directing said light from multiple planes of incidence, each being perpendicular to said surface." The parties subsequently agreed to the construction of the term. Accordingly, the Court does not address the '720 patent, but the parties' agreed construction is included in Appendix A.

262 F.3d 1258, 1267 (Fed. Cir. 2001). This intrinsic evidence includes the claims themselves, the specification, and the prosecution history. *See Phillips*, 415 F.3d at 1314; *C.R. Bard, Inc.*, 388 F.3d at 861. Courts give claim terms their ordinary and accustomed meaning as understood by one of ordinary skill in the art at the time of the invention in the context of the entire patent. *Phillips*, 415 F.3d at 1312–13; *Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003).

The claims themselves provide substantial guidance in determining the meaning of particular claim terms. *Phillips*, 415 F.3d at 1314. First, a term's context in the asserted claim can be very instructive. *Id*. Other asserted or unasserted claims can also aid in determining the claim's meaning because claim terms are typically used consistently throughout the patent. *Id*. Differences among the claim terms can also assist in understanding a term's meaning. *Id*. For example, when a dependent claim adds a limitation to an independent claim, it is presumed that the independent claim does not include the limitation. *Id*. at 1314–15.

"[C]laims 'must be read in view of the specification, of which they are a part.'" *Id*. (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc)). "[T]he specification 'is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.'" *Id*. (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)); *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002). This is true because a patentee may define his own terms, give a claim term a different meaning than the term would otherwise possess, or disclaim or disavow the claim scope. *Phillips*, 415 F.3d at 1316. In these situations, the inventor's lexicography governs. *Id*. Also, the specification may resolve ambiguous claim terms "where the ordinary and accustomed meaning of the words used in the claims lack sufficient clarity to permit the scope of the claim to be ascertained from the words alone." *Teleflex, Inc.*, 299 F.3d at 1325. But, "'[a]lthough the

specification may aid the court in interpreting the meaning of disputed claim language, particular embodiments and examples appearing in the specification will not generally be read into the claims.'" *Comark Commc'ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed. Cir. 1998) (quoting *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988)); *see also Phillips*, 415 F.3d at 1323. The prosecution history is another tool to supply the proper context for claim construction because a patent applicant may also define a term in prosecuting the patent. *Home Diagnostics, Inc., v. Lifescan, Inc.*, 381 F.3d 1352, 1356 (Fed. Cir. 2004) ("As in the case of the specification, a patent applicant may define a term in prosecuting a patent.").

Although extrinsic evidence can be useful, it is "'less significant than the intrinsic record in determining the legally operative meaning of claim language.'" *Phillips*, 415 F.3d at 1317 (quoting *C.R. Bard, Inc.*, 388 F.3d at 862). Technical dictionaries and treatises may help a court understand the underlying technology and the manner in which one skilled in the art might use claim terms, but technical dictionaries and treatises may provide definitions that are too broad or may not be indicative of how the term is used in the patent. *Id*. at 1318. Similarly, expert testimony may aid a court in understanding the underlying technology and determining the particular meaning of a term in the pertinent field, but an expert's conclusory, unsupported assertions as to a term's definition is entirely unhelpful to a court. *Id*. Generally, extrinsic evidence is "less reliable than the patent and its prosecution history in determining how to read claim terms." *Id*.

The '585 Patent

The '585 patent, entitled "One Chip USB Optical Mouse Sensor Solution," is directed to an optical mouse that implements a single chip for acquiring and processing image data to produce mouse movement data.

"single chip for"

The term "single chip for" appears in claim 1 of the '585 patent. Avago Technologies ("Avago") proposes the term should be given its plain and ordinary meaning, while STMicoelectronics, Inc. and StMicroelectronics N.V. ("STMicro") proposes "no more than a single chip, that single chip being capable of."

Avago believes the term is clear and does not require the Court's construction. While Avago does not offer an alternative construction, it argues that a jury would understand a "chip" to mean "a semiconductor die or device, or integrated microcircuit" and would further understand "single" to mean that the "functions are performed by one chip and not divided up amongst multiple chips." Docket No. 114 at 26. Avago acknowledges the specification discloses using a single chip to perform multiple functions in contrast to the prior art that used multiple chips to perform multiple functions; however, Avago contends this is just one embodiment of the invention and that the claims allow for the use of additional, supporting chips. Specifically, Avago argues that the claim language itself teaches the use of a single chip for performing certain, but not all, functions of the optical navigation device. '585 patent at 9:34-51 (claim 1 specifies three functions: "a single chip for receiving the reflected images, generating digital representations of the reflected images, generating a first set of movement data based on the digital representations of the reflected images").

Avago also contends that STMicro's construction would exclude a preferred embodiment of the '585 patent. Avago defines a chip as "semiconductor die that is mounted on a substrate to form [e.g.,] a . . . diode . . ."; and the patent describes the use of an LED ("light-emitting diode") for a light source. Docket No. 114 at 27 (citing *McGraw-Hill Dictionary of Scientific & Technical Terms* 340 (4th ed. 1989)). Thus, Avago contends an LED would be considered a chip by the '585 patent and argues that STMicro's proposed construction, which only allows a "solitary" chip,

precludes the use of an LED light source.

STMicro argues the term "single" is ambiguous as to whether it means a device that uses a single, solitary chip or a device that uses one chip to perform the claimed functions while allowing additional chips to perform other non-claimed functions. To resolve this quandary, STMicro argues that the specification and prosecution history only disclose a one-chip device. Docket No. 118 at 20.

The '585 patent's specification consistently describes the invention as an apparatus with one chip. While limitations contained in the specification are not ordinarily read into the claims, it is important to examine the specification. *See Markman*, 52 F.3d at 979 ("Claims must be read in view of the specification, of which they are a part."); *Hologic, Inc. v. SenoRx, Inc.*, 639 F.3d 1329, 1338 (Fed. Cir. 2011) (limiting the construction of a term where "the specification, including the figures, consistently and exclusively" disclose only one embodiment and "that is clearly what the inventors of the . . . patent conceived of"); *see also Honeywell Int'l, Inc. v. ITT Indus., Inc.*, 452 F.3d 1312, 1318–19 (Fed. Cir.2006). Although the claim uses an open-ended transitional term, "comprising" the specification expressly limits the invention to single chip embodiments and does not permit the inclusion of additional chips to perform other unspecified functions. '585 Patent at 1:42–45 ("This invention relates generally to devices for controlling a cursor on a display screen, also known as pointing devices. This invention relates more particularly to a single chip optical pointing device."). Contrary to Avago's contentions, the specification neither contemplates nor supports embodiments using multiple chips. In fact, the '585 patent distinguishes prior art optical navigation devices that had multiple chips for separate optical sensors and microcontrollers. *See* '585 patent at 9:6-9 ("In one form of the invention, optical sensorchip provides a single chip solution for an optical pointing device, rather than the multiple chips used in prior art devices."); *see also id.* at 2:17–38. Moreover, the prosecution history indicates that the invention resides in the use of a common integrated circuit

for all functionality of the optical navigation device. Resp. to Office Action (Nov. 12, 2003), at 7–8 (distinguishing the prior art, which did not use a common integrated circuit that incorporated other elements of the optical navigation device). Thus, '585 patent's innovation is to use one chip to implement the complete functionality of the device and excludes the use of any other chips.

Based on the plain meaning of the claim terms, the specific disclosure of the specification, and the distinguishing remarks in the specification and prosecution history, the Court construes "single chip for" as "no more than a single chip, that single chip being capable of."

"host device"

The term "host device" appears in claims 1 and 14 of the '585 patent. Avago proposes the term should be given its plain and ordinary meaning; in the alternative, it proposes "a device that, with respect to at least some function, controls the electronic or single chip." STMicro proposes a "central device that, among other things, positions the screen pointer based on the output motion data."

Avago argues that a "host" is understood to be a dominant device, yet contends this dominance extends over some, but not necessarily all, functionality of the device. In support, Avago argues the patent does not set limits on what the host device must control. *See* '585 patent at 4:66, 9:45-50 (claim 1), 10:62-67 (claim 14). Avago also argues that STMicro's proposed construction improperly imports limitations from the claims.

STMicro argues that the patent distinguishes the invention from the prior art, where the optical pointing devices contained micro controller unit ("MCU") chips as well as image sensors. *See* '585 patent at 2:17-18 ("Prior optical pointing devices have used an optical navigation sensor chip in conjunction with a micro controller."). STMicro claims the patent acknowledged that the prior art MCUs managed the transmission of data (e.g. motion information from the sensor chip) from the

optical sensor device and the host device was not responsible for any internal operations within the mouse. *See id.* at 2:22-38 ("[t]he micro controller is typically responsible for the overall management of the mouse, including receiving motion information from the optical navigation sensor chip and reporting the motion information to the host computer (or other host device), handling all other communications with the host computer . . . as well as other operational and regulatory functions"). Thus, STMicro argues that the host device must be something other than the mouse since "the patent clearly distinguishes the external host device from devices, such as an MCU, that operate within the mouse." Docket No. 118 at 27; *see also* Docket No. 150 at 56-57.

Both parties' proposed constructions are similarly flawed because they attempt to impose a functional requirement not specified in the claim—the proposed constructions add limitations regarding the host device's "control." While this limit on the host device's functionality may be in the preferred embodiment, it is not a proper claim limitation and is not supported by the claim language or specification. In light of the '585 patent specification and claims, one of ordinary skill in the art would understand that a "host device" is a device that receives motion data and testing information output from the chip. However, the Court declines to specifically construe the term as its plain and ordinary meaning would be readily understood by the jury.

"an electronic chip for use in an apparatus"

The term "an electronic chip for use in an apparatus" appears in claim 14 of the '585 patent. Avago proposes the term should be given its plain and ordinary meaning and, in the alternative, proposes "a semiconductor die or device, or integrated microcircuit, for use in an apparatus." STMicro proposes a "an electronic chip for use, without other chips, in an apparatus."

Avago argues no construction is necessary as the plain language of the term is clear and would be understood by a jury. Avago contends that STMicro's proposed construction attempts to read

additional limitations into the term. Avago also argues STMicro's construction is improper because it does not allow for other electronic chips to be present, which is contrary to the claim's use of the word "an."

Although "an electronic chip for use in an apparatus" only appears in claim 14, STMicro contends the functions of the claim 14 chip are the same functions performed by the chip disclosed in claim 1; in other words, where claim 1 describes a single-chip device, claim 14 describes a chip for use in such a device. Docket No. 118 at 25. STMicro's remaining contentions mirror the arguments it made regarding "host device"—the specification distinguished multi-chip mice in the prior art over the claimed single-chip invention, and the applicant argued patentability over the prior art because he claimed a single-chip solution. *See* '585 patent at 9:1–17; Resp. to Office Action (Nov. 12, 2003) at 7–8.

The parties' arguments are similar to their arguments regarding "single chip." However, claim 14 does not expressly provide that "an electronic chip for use in an apparatus" is a "single chip." Claim 1 is directed to an apparatus having a single chip (e.g., a single chip mouse), but claim 14 does not recite that the chip "only" or "exclusively" for use in an apparatus for controlling the position of a screen pointer. Thus, claim 14 is directed towards the use of the chip in an apparatus and does not specify a "single chip." Thus, the claim language does not provide a basis to impose a similar, singular limitation on the chip, and the Court declines to import such a limitation. As with "host device," the Court will not specifically construe the "an electronic chip for use in an apparatus" since its plain and ordinary meaning would be readily understood by the jury.

The '354 Patent

The '354 patent, entitled "Operator Input Device," is directed toward an operator input device (e.g. a computer mouse) "configured to provide position information based on relative movement of

a surface and the operator input device." '354 patent 18:33-35, 19:40-42. The operator input device uses image processing to produce position information to control movement of a cursor on a computer display screen. *Id.* at 6:54-57. The position information is based on relative movement between the input device and the surface it rests upon and slides across. *Id*. at 5:2-4.

An image detector in the device has a predetermined sample area within an image viewing area. *Id*. at 6:3-13. The image detector images a surface pattern and produces a pattern signal representative of a surface pattern image. *Id*. at 6:25-33. A controller uses the pattern signal to determine where the image detector is located relative to the surface pattern image and compute position information. *Id*. at 6:52-7:3. This is achieved by taking a sequence of surface images as the device is moved over the surface. *Id*. The controller sequence uses the pattern signals to produce position information that is indicative of the device's movement over the surface. *Id*. at 7:5-53.

"position information"

The term "position information" appears in claims 31 and 35 of the '354 patent. Avago proposes the term should be given its plain and ordinary meaning and, in the alternative, proposes "information relating to position, including changes in position."[2] STMicro proposes "[the] location of the image detector relative to the surface."

Avago contends the '354 patent uses the term more broadly than STMicro's proposed construction. For example, Avago argues that claim 31 specifies that "position information" is provided "based on relative movement," which broadly encompasses movement information and is not limited to a "location." '354 patent at 18:33-57, 1:18-19, 6:52-53. Avago further argues the '354

[2] In its briefing, Avago originally provided "information relating to position, *such as movement*" as its alternative construction. During the *Markman* hearing, Avago changed its proposed construction to "information relating to position, *including changes in position*." *Compare* Docket No. 114 at 8-9 *with* Docket No.150 at 9 (emphasis added).

patent provides an operational flowchart that shows "determin[ing] movement pattern" directly flows to the "output [of] position information." *See, e.g.,* '354 patent at Fig. 4A.

STMicro argues that claims 31 and 35 explain that position information is used to control the movement of an image (e.g. cursor) on a computer display screen. *Id*. at 18:33-53 (claim 31); 19:41-20:9. Thus, STMicro argues that "position information" refers to where that image sensor is located in relation to the surface being imaged. STMicro contends Avago's construction is too narrow because it equates "movement" to "position information." While STMicro concedes that position information may relate to movement, it maintains the terms are conceptually distinct and cannot be the same thing. STMicro contends this is supported by the claims (operator input device is "configured to provide *position information based on relative movement* of a surface and the operator input device") and specification ("the present invention related to an input device for providing *position information to the computer based on movement of the input device*"). *Id*. at 18:33-53, 1:16-19 (emphasis added). Thus, STMicro urges that using the position of the mouse to indicate movement or to control the cursor's movement shows that the position is defined by location and not motion. Docket No. 118 at 3-4.

Avago's alternative construction is overly generalized and vague as it simply rephrases the term "position information" and does not provide further meaning or definition to the term. STMicro's proposed construction is flawed because it broadly implies the "position information" could also include the location of the image detector in the third dimension of height (e.g. the position of a mouse in that is held above the surface). This is inconsistent and unsupported by the patent, which utilizes linear (x, y) coordinates. *See id.* at 7:39-8:1 (in describing cross-correlation, the patent specification clearly indicates that movement on which the position information is based is within a coordinate system).

The patent describes the term "position information" as the relative movement between the surface and operator input device. For example, movement is detected by first identifying the pattern at a sample area and then comparing the pattern or image at a "new" location by performing a relative comparison of the patterns. '354 patent at 6:3-7:3. As described in the specification, "position information" refers to a "vector" quantity. *Id.* at 5:29-39. In other words, position information includes both magnitude and direction. This position information is used to control movement of a cursor on a screen, and the cursor movement will be of a certain distance amount (i.e. magnitude) and in a certain direction. *Id.* at 7:1-3 (a "mouse continues to provide position information indicative of the relative movement of mouse and work surface"). Accordingly, the term "position information" necessarily requires a vector quantity with distance and direction. The Court construes the term as "the amount and direction of movement of the operator input device across the surface."

The '007 and '661 Patents

The '007 patent, entitled "Method of Operating an Optical Mouse," and the '661 patent, entitled "'Seeing Eye' Mouse for Computer System," are continuations from U.S. Patent No. 6,433,780 ("the '780 patent) and substantially share the same specification. The patents are directed to a method ('007) and apparatus ('661) for tracking movement of an optical mouse. A non-coherent light source, in a movable housing, illuminates a surface and provides circuitry that predicts movement of the housing relative to the surface. '007 and '661 patents at [57] Abstract. To track and predict movement, the patents describe processing two-dimensional arrays of data that are related to light reflected by surface irregularities. *Id.*

"surface irregularities"

The term "surface irregularities" appears in claims 1, 2, 8, 14, 17, 24, 25, 28, and 33 of the '007 patent and claims 17, 31, 66, 77, 80, 189, 198, 215, 227, 240, 250, 264, 276, and 287 of the '661

patent. Avago defines the term as "variations in the heights of portions of a surface," while STMicro proposes "differences in texture or other detail on the surface."

Avago argues that STMicro's inclusion of surface details in its construction is inconsistent with how the patents' claims use "surface irregularities." Avago argues that the term is synonymous with the specifications' references to "micro textures." While Avago recognizes that STMicro's use of the term "texture" may refer to "micro textures," Avago argues that STMicro's construction improperly includes two-dimensional detail variations (e.g. smooth versus rough surface areas). Avago contends this is improper because the patents only discuss producing highlights and shadows from incident illumination, which requires height variations across the surface.

STMicro acknowledges the specification discusses topographical variations, but contends the claims are not limited to these descriptions. STMicro argues the specifications' references to "micro textures" and "micro detailed work surface" indicates the imaging includes surface details not limited to height variations. '007 patent at 4:7-9; *see also* 4:33-37 ("optically detect motion by directly imaging . . . the various particular spatial features of a work surface below the mouse, much as human vision is believed to do").

STMicro's construction using "differences in texture" and "or other detail on the surface" is ambiguous and does not further define the term. Ordinarily, "texture" implies a connotation of "feel," but the specification uses the word "texture" in the context of "the consistency of a surface." *Id.* at 4:44-52 (discussing "smooth glass" in contrast to glass covered with fingerprints). Avago's construction is consistent with the specifications' references to "micro textures," which are surface variations that result in "a rich collection of highlights and shadows when illuminated with a suitable angle of incidence." '007 patent at 4:43-44, 50. Moreover, the specification specifically refers to "surface height irregularities" in discussing illuminating a surface's micro texture. *Id.* at 9:29-32

("The illumination of micro textured surfaces is most effective when done from the side, as this accentuates the pattern of highlights and shadows produced by surface height irregularities.").

Accordingly, the Court construes "surface irregularities as "variations in the heights of portions of a surface."

"portion[s]"

The term "portion[s]" appears in claims 1, 4, 8, 9, 14-18, 24, 25, and 28 of the '007 patent and claims 1, 2, 4, 16, 22, 30, 57, 65, 67, 76, 80, 142, 150, 151, 188, 197, 199, 200, 202, 216, 229, 239, 241, 249, 251, 263, 265, 275, 277, 278, and 286 of the '661 patent. Avago believes the term should be given its plain and ordinary meaning or, alternatively, means "a section or part of a larger thing." STMicro proposes "as much overlapping array data as possible."

Avago contends "portion" is easily understood and requires no further construction. STMicro argues that its construction is supported by the applicant's arguments during the prosecution history. Specifically, STMicro contends the applicant limited the invention to a system that uses the entire overlapping regions of data arrays to compute movement.

The '007 and '661 Patents include several claims that require processing at least a "portion" of an array of data related to light reflected from the surface with at least a "portion" of another array of such data. In response to an obviousness rejection over U.S. Patent No. 6,172,354 (Adan) in the parent patent's prosecution, the applicant amended claims and distinguished Adan based on the way the parent patent correlated first and second arrays of data. The applicant argued that "all overlapping data" is used in the sample and reference frames in determining movement. *See* (Replacement) Amendment "C" (Feb. 4, 2002) at 6. The applicant also noted the claims were amended to correlate "the values in all memory array locations that correspond to overlap between the comparison frame and the other of the reference frame or the sample frame." The applicant explained that the

"correlation is performed upon as much data from the photo detectors as possible" and that Adan taught comparing only an undefined portion of the arrays, not the entire area of overlap. *Id.* at 7. However, the statements made in the parent patent's prosecution history relate to the sample and reference frames and do not support a disclaimer with regard to "portion." Thus, the prosecution history does not support the limitation of "portion" as proposed by STMicro. The plain and ordinary meaning of the term "portion" is easily understood by a jury, and no construction is required.

"predict[s]/[ion]/[ed]/[ing]"

Numerous claims in the '007 and '666 patents use various forms of the root word "predict." The terms "predict," "predicts," "prediction," "predicted," and "predicting" appear in asserted claims 1, 4, 8, 9, 14, 19, 25, 28, and 33 of the '007 patent, and the terms "prediction," "predictions," and "the prediction" appear in asserted claims 1, 2, 80, 139, 152, 185, 199, 200, 209, 223, 236, 248, 251, 259, and 272 of the '661 patent. Avago believes the term should be given its plain and ordinary meaning or alternatively defined as "generate the stated information representative of a movement before the movement." For claims 1, 9, and 14 of the '007 patent, STMicro defines "prediction" as a "shift of the first array used in the computation." For claim 4 of the '007 patent, STMicro defines "prediction" as a "shift of the first array used in the computation of a second movement." For claims 19, 25, 28, and 33 of the '007 patent, STMicro defines "predicting validity" as "determining validity."

Avago contends the term is used in the specification in accordance with its ordinary meaning. Avago points to excerpts from the specification and claims where the term is used in several different contexts, generally relating to the prediction of movement.

STMicro contends the patentee acted as a lexicographer and defined the term "prediction." Because the specification states that the described method "may be termed 'prediction'" STMicro argues this language, and the use of quotations, signifies that the patentee was defining the term

"prediction." *See* '007 patent at 6:46-7:2; '661 patent at 7:4-32. However, STMicro contends this definition only applies in the context of computing future movement, which is defined as shifting the pixels of a reference frame so that for the next sample frame a nearest neighbor can be expected to correlate. For claims that do not use "predicting" in the context of future movement (e.g. "predicting validity"), STMicro contends the patentee's definition is inapplicable and instead proposes "determining validity." STMicro argues these different definitions have the same underlying meaning and are merely adjusted to reflect the various forms of "predict" in the claims.

STMicro's proposed constructions, with different definitions for the various conjugates of "predict," are inconsistent and would be confusing to a jury. Moreover, the proposed constructions are unsupported by the patents. The specification describes storing and using directional and displacement data to "predict" movement by using comparison frames. These frames are images that correspond to possible movements generated from shifting the sample, or reference frame, in a direction that corresponds to the possible relative movement. The prediction involves generating information that is used in the correlating movements. While the specification characterizes this operation as a "prediction," the patents do not specifically define of the term. Thus, the patents and file history do not support STMicro's argument that the patentee was attempting to be his own lexicographer in defining the term. *See Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir.1996) (a patentee can act as his own lexicographer so long as any special definitions of the claim terms are clearly stated in the patent specification or file history). The patents use "predict" and its various conjugates in their plain and ordinary sense that is easily understood by a jury. Accordingly, no construction is required.

CONCLUSION

For the foregoing reasons, the Court interprets the claim language in this case in the manner set forth above. For ease of reference, the Court's interpretations of the claims are set forth in a table as Appendix A.

So ORDERED and SIGNED this 5th day of August, 2011.

LEONARD DAVIS
UNITED STATES DISTRICT JUDGE

Appendix A

The ’585 Patent

CLAIM TERMS	COURT’S CONSTRUCTIONS
single chip for	no more than a single chip, that single chip being capable of
host device	plain and ordinary meaning
an electronic chip for use in an apparatus	plain and ordinary meaning

The ’354 Patent

CLAIM TERM	COURT’S CONSTRUCTION
position information	the amount and direction of movement of the operator input device across the surface
CLAIM TERM	**AGREED CONSTRUCTION**
intensity	power, strength, or amount of electromagnetic radiation for a given area

The ’007 and ‘661 Patents

CLAIM TERMS	COURT’S CONSTRUCTIONS
surface irregularities	variations in the heights of portions of a surface
portion[s]	plain and ordinary meaning
predict [s]/[ion]/[ed]/[ing]	plain and ordinary meaning
CLAIM TERMS	**AGREED CONSTRUCTIONS**
uniform	lacking variation
nearly uniform/relatively uniform/sufficiently uniform	lacking substantial variation
predetermined value	a value established in advance
sends signals not related to	sends signals independent of

The ’720 Patent

CLAIM TERM	AGREED CONSTRUCTION
including simultaneous directing said light from multiple planes of incidence, each being perpendicular to said surface	including simultaneously directing said light from multiple directions and planes of incidence, each plane of incidence being perpendicular to the surface